

IN THE SPECIFICATION

On page 58, please replace the paragraph from line 7 to line 10 with the following amended paragraph:

mbD7S8A (on 572 nm encoded beads): (SEQ ID NO: 1)

5'-(FLSN)GCAGC CCT TTC CCG GAA TGC GC(biotin dT)GC (DABCYL)-3'

cmb D7S8A: (SEQ ID NO: 2)

5'-TAT GAC CAG CAT TCC GGG AAA GGG AAG AAA-3'

On page 58, please replace the paragraph from line 12 to line 15 with the following amended paragraph:

mbWNT5A (on 590 nm encoded beads): (SEQ ID NO: 3)

5'-(FLSN)GCACG CAC AAA CTG GTC CAC GA CG(biotin dT)GC (DABCYL)-3'

cmbWNT5A: (SEQ ID NO: 4)

5'-ACG GAG ATC GTG GAC CAG TTT GTG TGC AAG-3'

On page 58, please replace the paragraph from line 17 to line 20 with the following amended paragraph:

mbG (on 630 nm encoded beads): (SEQ ID NO: 5)

5'-(FLSN)GCGAGC CAC CAA AGA TGA TAT GC(biotin dT) CGC (DABCYL)-3'

cmbG: (SEQ ID NO: 6)

5'-AAA GAA AAT ATC ATC TTT GGT GTT TCC TAT-3'

On page 58, please replace the paragraph from line 22 to line 25 with the following amended paragraph:

mbT(on 572 + 616 nm encoded beads): (SEQ ID NO: 7)

5'-(FLSN)GCGAGC CAC CAA ATA TGA TAT GC(biotin dT) CGC (DABCYL)-3'

cmbG cmbT: (SEQ ID NO: 8)

5'-AAA GAA AAT ATC ATA TTT GGT GTT TCC TAT-3'

On page 60, please replace the paragraph from line 4 to line 6 with the following amended paragraph:

Loop Probe Oligonucleotides Used:

LDLr Loop A-5 – 5' amino-CGAGCATATGGTCCTCTTCCGCTCG (SEQ ID NO: 9)

LDLr Loop B-5 – 5' amino-CGAGCATATGGTTCTCTTCCGCTCG (SEQ ID NO: 10)

On page 60, please replace the paragraph from line 8 to line 10 with the following amended paragraph:

Complementary Target Oligonucleotides:

LDLr test A 5' fl-CCCAGTGTGGAAGAGGACCATATCCTCTGGG (SEQ ID NO: 11)

LDLr test B 5' fl-CCCAGTGTGGAAGAGAACCATATCCTCTGGG (SEQ ID NO: 12)

On page 60, please replace the paragraph from line 12 to line 14 with the following amended paragraph:

PCR Primers:

LDLrsb 5'biotin tcacaggttcgatgtcaac (SEQ ID NO: 13)

LDLrab 5'biotin cagggtggtcctctcacac (SEQ ID NO: 14)

On page 62, please replace the paragraph from line 4 to line 9 with the following amended paragraph:

Sequence (151bp) spanning the D7S8 locus:

Upper strand: (SEQ ID NO: 15)

5' – CTA GGG ATG TTC CTG TCT CAG GGA CCC TGA CCT TAT TGC TCC CCT TTC
CXG GAA TGC TGG TCC TGA CAC AAT AAT ATA AGC TCT GAG AAG GCA GCC ATT
TTT GTA TGC TTT ACT CCA GGC TAC TTC TCA ACT CGC AGA ACA GGG CTT GGC
A – 3'

On page 62, please replace the paragraph from line 11 to line 15 with the following amended paragraph:

Lower strand: (SEQ ID NO: 16)

3' – GAT CCC TAC AAG GAC AGA GTC CCT GGG ACT GGA ATA ACG AGG GGA
AAG GXC CTT ACG ACC AGG ACT GTG TTA TTA TAT TCG AGA CTC TTC CGT CGG
TAA AAA CAT ACG AAA TGA GGT CCG ATG AAG AGT TGA GCG TCT TGT CCC
GAA CCG T – 3 5'

On page 62, please replace the paragraph from line 27 to line 29 with the following amended paragraph:

5. 76bp fragment PCR primers:

Forward primer: 5'-biotin-G GGA CCC TGA CCT TAT TGC-3' (SEQ ID NO: 17)

Reverse primer: 3'-TCG AGA CTC TTC CGT CGG T-biotin-5' (SEQ ID NO: 18)

On pages 62 and 63, please replace the paragraph from line 30 on page 62 to line 2 on page 63 with the following amended paragraph:

6. 151 bp fragment PCR primers:

Forward primer: 5'-biotin-CTA GGG ATG TTC CTG TCT CAG-3' (SEQ ID NO: 19)

Reverse primer: 3'-~~3'~~-A GCG TCT TGT CCC GAA CCG T-biotin-5' (SEQ ID NO: 20)

On page 63, please replace the paragraph from line 3 to line 10 with the following amended paragraph:

7. mbD7S8A (Midland Certified): (SEQ ID NO: 1)

5'-Fl-GCAGC(~~CTA~~ CCT TTC CCG GAA TGC GC(biotin dT)GC-dabcyl-3'
mbD7S8B (SEQ ID NO: 21)

5'-Fl-GCAGC(~~CTA~~ CCT TTC CTG GAA TGC GC(biotin dT)GC-dabcyl-3'

Complementary D7S8A: (SEQ ID NO: 2)

5'-TAT GAC CAG CAT TCC GGG AAA GGG AAG AAA-3'

Complementary D7S8B: (SEQ ID NO: 22)

5'-TAT GAC CAG CAT TCC AGG AAA GGG AAG AAA-3'

On page 63, please replace the paragraph from line 11 to line 13 with the following amended paragraph:

8. Linear probes for covalent conjugation of oligos on beads:

AminoD7S8A: 5'NH₂-TTT TTT ACC AGC ATT CCG GGA AAG-3' (SEQ ID NO: 25)

AminoD7S8B: 5'NH₂-TTT TTT ACC AGC ATT CCA GGA AAG-3' (SEQ ID NO: 26)